

WHAT IS CLAIMED IS:

1. A program executing management system comprising:

5 a processing element definition unit for storing, for each identification information of a process which sequentially uses a plurality of processing elements, the identification information and execution order of a plurality of processing elements used in the process;

10 a recovery processing element definition unit for storing the identification information of a recovery processing element to be executed when abnormality occurs, for each identification information of the plurality of processing elements;

15 an executing unit for referring to said processing element definition unit to obtain the identification information of a processing element to be processed next, on the basis of a processing element use request from the process, and executing the processing element corresponding to the obtained identification information; and

20 a recovery executing unit for, when an abnormality occurs during execution of a processing element by said executing unit, referring to said recovery processing element definition unit on the basis of the identification information of the processing element which has

25 caused the abnormality, and executing a recovery processing element corresponding to the abnormality.

an application executes the process,
said system further comprises the plurality of
5 processing elements to be sequentially used and
an application executing unit for executing the
application,

said executing unit refers to said processing element definition unit to obtain the identification information of a processing element to be processed next, on the basis of a use request from the applica-
15 tion, and executes the processing element corresponding to the obtained identification information.

wherein said executing unit identifies a
processing element use request from the process for
each unique number issued by said number issuing unit,
25 manages the number of executed processing elements for
each unique number, refers to said processing element

definition unit on the basis of the number of executed processing elements, obtains the identification information of a processing element to be executed next, and executes the processing element corresponding to the obtained identification information.

4. A program executing management system comprising:

a processing element definition unit for storing, for each identification information of a process which sequentially uses a plurality of processing elements, the identification information and execution order of a plurality of processing elements used in the process;

a recovery processing element definition unit for storing the identification information of a recovery processing element to be executed when abnormality occurs, for each identification information of the plurality of processing elements;

an executing unit for, when an execution request for the process is generated, referring to said processing element definition unit on the basis of the identification information of the process, and sequentially executing a plurality of processing elements corresponding to the identification information of the process in the execution order of the elements; and

a recovery executing unit for, when an abnormality occurs during execution of a processing element by said

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executing unit, referring to said recovery processing
element definition unit on the basis of the identifica-
tion information of the processing element which has
caused the abnormality, and executing a recovery
5 processing element corresponding to the abnormality.

5. A computer-readable computer program product
comprising:

an executing code for referring to, on the
basis of a process use request from a process which
10 sequentially uses a plurality of processing elements,
the identification information and execution order of
a plurality of processing elements, stored for each
identification information of the process and to be
used in the process, obtaining the identification
15 information of a processing element to be processed
next, and executing the processing element correspond-
ing to the obtained identification information; and

a recovery executing code for, when an abnormality
occurs during execution of a processing element by
20 said executing code, referring to the identification
information of a recovery processing element, stored
for each identification information of the plurality
of processing elements and to be executed when
the abnormality has occurred, on the basis of the
25 identification information of the processing element
which has caused the abnormality, and executing
a recovery processing element corresponding to the

abnormality.

6. A computer-readable computer program product according to claim 5, wherein

the process is an application which requests
5 the use of the plurality of processing elements,
said product comprises the plurality of processing
elements to be sequentially used and an application
executing code for executing the application, and

10 said executing code refers to the identification
information and execution order of a plurality of
processing elements, stored for each identification
information of the application and to be used in the
application, on the basis of a use request from the
application, obtains the identification information of
15 a processing element to be processed next, and executes
the processing element corresponding to the obtained
identification information.

7. A computer-readable computer program product according to claim 5, further comprising a number
issuing code for, when an execution request for the
20 process is generated, issuing an unique number
corresponding to the execution request,

wherein said executing code identifies a processing element use request from the process for each unique number issued by said number issuing unit, manages the number of executed processing elements for each unique number, refers to the identification

information and execution order of a plurality of processing elements stored for each identification information of the process, obtains the identification information of a processing element to be executed next on the basis of the number of executed processing elements, and executes the processing element corresponding to the obtained identification information.

8. A computer-readable computer program product comprising:

an executing code for, when an execution request for a process which sequentially uses a plurality of processing elements is generated, referring to a plurality of processing elements so stored as to correspond to the identification information of the process and the execution order of the elements, and sequentially executing the plurality of processing elements made to correspond to the identification information of the process; and

a recovery executing code for, when an abnormality occurs during execution of a processing element by said executing code, referring to the identification information of a recovery processing element, stored for each identification information of the plurality of processing elements and to be executed when the abnormality has occurred, on the basis of the identification information of the processing element

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a definition code for storing, for each

identification information of the process, the
identification information of a plurality of processing
elements used in the process, and the execution order
of a plurality of processing elements used in the
5 process.

11. A computer-readable computer program product
according to claim 10, further comprising:

an executing code for, when the identification
information of a process to be executed is input,
10 referring to the contents defined by said definition
code, and executing a processing element corresponding
to the input identification information of the process
in an execution order corresponding to the input
identification information of the process; and

15 a result notification code for notifying the
process of the result of execution of a processing
element by said executing code.

12. A process executing management method using
a computer system, comprising:

20 the executing step of referring to, on the basis
of a process use request from a process which
sequentially uses a plurality of processing elements,
the identification information and execution order of
a plurality of processing elements, stored for each
25 identification information of the process and to be
used in the process, obtaining the identification
information of a processing element to be processed

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the result notification step of notifying the
5 process of the execution result of a processing element
obtained in the executing step.

the input step of inputting the identification
10 information of a process which sequentially executes
a plurality of reusable processing elements, the
identification information of a plurality of processing
elements used in the process, and the execution order
of the plurality of processing elements; and

14. A method according to claim 13, further comprising:

the executing step of, when the identification information of a process to be executed is input, referring to the contents defined in the definition step, and executing a processing element corresponding to the input identification information of the process

in an execution order corresponding to the input
identification information of the process; and

the result notification step of notifying the process of the execution result of a processing element obtained in the execution step.